



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/986,412	11/08/2001	Masahisa Ikeda	PF-2905/NEC/US	5252

30743 7590 07/26/2006

WHITHAM, CURTIS & CHRISTOFFERSON & COOK, P.C.
11491 SUNSET HILLS ROAD
SUITE 340
RESTON, VA 20190

EXAMINER

PEACHES, RANDY

ART UNIT PAPER NUMBER

2617

DATE MAILED: 07/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/986,412	Applicant(s) IKEDA, MASAHISA	
	Examiner Randy Peaches	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-6,8 and 9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-6,8 and 9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. ***Claims 1, 3-6, 8 and 9*** are rejected under 35 U.S.C. 103(a) as being unpatentable over Imamatsu (U.S. Patent Number 6,687,901 B1) in view of Heidari (European Patent Number EP 0 802 694 A2) in further view of Fries et al. (U.S. Patent Number 6,425,125 B1) in further Saito (U.S. Patent Number 6,658,247 B1).

Regarding ***claim 1***, Imamatsu teaches in columns 1 and 3 lines 7-14 lines 30-66, of a method of updating software, which reads on claimed "program", in a terminal device (200), such that, as taught by Imamatsu in column 3 lines 56-67 and continued in column 4 lines 1-9, where the update-used software, which reads on claimed "update data," and the present control software, which reads on claimed "existent program," may be stored separately within the said terminal device (200), where the said terminal device (200) is connected mutually to the base station (400) (see column 16-20) and if the transmission of the said software is interrupted due to a disconnection between them, the a check sum is performed in the downloading buffer for errors, and if verified

the downloading operation should resume from the interrupted point, as disclosed in column 15 lines 30-55.

However, Imamatsu does not disclose transmitting the said downloaded software from the said base station to the said terminal device.

Heidari teaches in column 2 lines 13-18, 25-30, of transmitting programs from the said base station to the mobile telephone.

Therefore, at the time of the invention it would have been obvious to a person of ordinary skill in the art to modify the teachings of Imamatsu (U.S. Patent Number 6,687,901 B1) and Heidari (European Patent Number EP 0 802 694 A2) in order to obtain a method to retransmit an update program to a said terminal device from a said base station.

However, the combination of Imamatsu and Heidari fail to clearly disclose wherein an arithmetic unit verifies a pointer of a completely received final update data set and determines a next pointer in connection with the next data set, which should be received next.

Fries teaches wherein a final update of data is a program where an update server compares the old character strings from a old version with the new character string of the new version in order to identify matching section of a download. Once identified, headers or pointers are placed in to distinguish matching and non-matching sections. Each is recognized during the upgrade process to ensure an efficient download of information. See Abstract and column 1 lines 39-67 and column 2 lines 1-21.

Therefore, at the time of the invention it would have been obvious to a person of ordinary skilled in the art to modify the combined teachings of Imamatsu and Heidari to further include Fries et al. in order to provide a mechanism to detect the heads or points in a downloaded data set to ensure and efficient download process.

However, the combination of Imamatsu, Heidari and Fries et al. fails to expressly disclose where in the said transmission blocks a plural of pointers are added.

Saito disclose in the Abstract and columns 6 and 7 lines 1-66 lines 1-25 of load counters "n" and bit counters "m", which reads on claimed "pointers", that are used to determine which block of transmitted data should be downloaded during re-transmission. This eliminates the unnecessary need to re-transmit the complete transmission block during re-transmission.

Therefore, at the time of the invention it would have been obvious to a person of ordinary skilled in the art to modify the combined teachings of Imamatsu Heidari and Fries et al. to further include Saito in order allow the system the capability to transmit the said transmission blocks according to the said load counter and bit counter, which identifies the download location of the transmission block in case of an abnormal situation occurring causing a retransmission of the information.

Regarding **claim 3**, as the above combination of Imamatsu (U.S. Patent Number 6,687,901 B1), Heidari (European Patent Number EP 0 802 694 A2), Fries et al. (U.S. Patent Number 6,425,125 B1) and Saito (U.S. Patent Number 6,658,247 B1) are made, the combination according to **claim 1**, Saito, in column 7 lines 8-25, further teaches that

when an interrupt occurs the value of the load counter N, which reads on claimed "pointer" is stored. Thus when downloading resumes, the **NEXT** block is downloaded, base on the saved value of the said load counter. In conjunction with the said load counter, the said bit counter value is simultaneously saved, thus allowing the system to concurrently download from the **NEXT** data block. See column 7 lines 15-25.

Regarding **claim 4**, as the above combination of Imamatsu (U.S. Patent Number 6,687,901 B1), Heidari (European Patent Number EP 0 802 694 A2), Fries et al. (U.S. Patent Number 6,425,125 B1) and Saito (U.S. Patent Number 6,658,247 B1) are made, combination according to **claim 1**, further discloses, as taught by Imamatsu in column 12 lines 37-45, where after the completion of the said download of the update software, a check sum is used to search for any data errors, which reads on claimed "test".

Regarding **claim 5**, as the above combination of Imamatsu (U.S. Patent Number 6,687,901 B1), Heidari (European Patent Number EP 0 802 694 A2), Fries et al. (U.S. Patent Number 6,425,125 B1) and Saito (U.S. Patent Number 6,658,247 B1) are made, combination according to **claim 3**, further discloses, as taught by Imamatsu in column 12 lines 32-65, where when an error is detected during the said software update procedure, the system is operable to write or erase the contents of the ROM and the downloading process is retried to complete the update software procedure.

Regarding **claim 6**, Imamatsu teaches of a terminal device (200) including:

- a buffer memory (206), which reads on claimed "receiving unit", for receiving the update software transmitted. See column 3 lines 30-34, 57-64.
- a CPU (201), which reads on claimed "updating unit", for storing said update software and updating corresponding parts in the present control software, which reads on claimed "existing program", with the said update software. See column 3 lines 56-64. Imamatsu also teaches in column 3 lines 56-67 and continued in column 4 lines 1-9, such that, the update-used software, which reads on claimed "update data," and the present control software, which reads on claimed "existent program," may be stored separately within the said terminal device (200);
- a battery back-up RAM (34), which reads on claimed "re-starting unit", for re-starting transmission process of the remaining non-transmitted parts of the said update software (see column 15 lines 40-56), after it is verified that the said terminal device (200) is not in waiting state. See column 9 lines 11-15.

However, Imamatsu does not disclose transmitting the said downloaded software from the said base station to the said terminal device.

Heidari teaches in column 2 lines 13-18, 25-30, of transmitting programs from the said base station to the mobile telephone.

Therefore, at the time of the invention it would have been obvious to a person of ordinary skilled in the art to modify the teachings of Imamatsu (U.S. Patent Number 6,687,901 B1) and Heidari (European Patent Number EP 0 802 694 A2) in order to obtain a method for a said terminal device to receive a said update program from a said base station and if an interruption occur during the transmission process, the remaining

said update date is able to be re-transmitted from the interrupted point to the said terminal device without having to download the entire transmission block.

However, the combination of Imamatsu and Heidari fail to clearly disclose wherein an arithmetic unit verifies a pointer of a completely received final update data set and determines a next pointer in connection with the next data set, which should be received next.

Fries teaches wherein a final update of data is a program where an update server compares the old character strings from a old version with the new character string of the new version in order to identify matching section of a download. Once identified, headers or pointers are placed in to distinguish matching and non-matching sections. Each is recognized during the upgrade process to ensure an efficient download of information. See Abstract and column 1 lines 39-67 and column 2 lines 1-21.

Therefore, at the time of the invention it would have been obvious to a person of ordinary skilled in the art to modify the combined teachings of Imamatsu (U.S. Patent Number 6,687,901 B1) and Heidari (European Patent Number EP 0 802 694 A2) to further include Fries et al. in order to provide a mechanism to detect the heads or points in a downloaded data set to ensure and efficient download process.

However, the combination of Imamatsu, Heidari and Fries et al. fails to expressly disclose where in the said transmission blocks a plural of pointers are added.

Saito disclose in the Abstract and columns 6 and 7 lines 1-66 lines 1-25 of load counters "n" and bit counters "m", which reads on claimed "pointers", that are used to

determine which block of transmitted data should be downloaded during re-transmission. This eliminates the unnecessary need to re-transmit the complete transmission block during re-transmission.

Therefore, at the time of the invention it would have been obvious to a person of ordinary skilled in the art to modify the combined teachings of Imamatsu, Heidari and Fries et al. to further include Saito in order allow the system the capability to transmit the said transmission blocks according to the said load counter and bit counter, which identifies the download location of the transmission block in case of an abnormal situation occurring causing a retransmission of the information.

Regarding **claim 8**, as the above combination of Imamatsu (U.S. Patent Number 6,687,901 B1), Heidari (European Patent Number EP 0 802 694 A2), Fries et al. (U.S. Patent Number 6,425,125 B1) and Saito (U.S. Patent Number 6,658,247 B1) are made, combination according to **claim 8**, further discloses, as taught by Imamatsu in column 12 lines 37-45, where after the completion of the said download of the update software, a check sum is used to search for any data errors, which reads on claimed "test".

Regarding **claim 9**, as the above combination of Imamatsu (U.S. Patent Number 6,687,901 B1), Heidari (European Patent Number EP 0 802 694 A2), Fries et al. (U.S. Patent Number 6,425,125 B1) and Saito (U.S. Patent Number 6,658,247 B1) are made, combination according to **claim 6**, further discloses, as taught by Imamatsu in FIGURE 4a, column 6 lines 1-14, a Flash ROM (33) for re-writing the present control software

Art Unit: 2617

(43) into the new control software in the said terminal device (200). See column 6 lines 15-61.

Response to Arguments

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

In response to applicant's argument that Imamatsu (U.S. Patent Number 6,687,901 B1), Heidari (European Patent Number EP 0 802 694 A2), Fries et al. (U.S. Patent Number 6,425,125 B1) and Saito (U.S. Patent Number 6,658,247 B1) are non-analogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, the Examiner has relied upon Imamatsu (U.S. Patent Number 6,687,901 B1), Heidari (European Patent Number EP 0 802 694 A2), Fries et al. (U.S. Patent Number 6,425,125 B1) and Saito (U.S. Patent Number 6,658,247 B1) in order to establish a basis of the Examiner's position toward the rejection of the instant Application. The cited prior relevance, in its combination, is based on the premise that

each reference is geared toward the updating of software information to a device, which is synomonous to the bases of the instant application.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Randy Peaches whose telephone number is (571) 272-7914. The examiner can normally be reached on Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph H. Feild can be reached on (571) 272-4090. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Randy Peaches
July 17, 2006


CHARLES APPIAH
PRIMARY EXAMINER